

STABAXOL® P 110

PLASTICS ADDITIVES

Function

Stabaxol® P 110 is an antihydrolysis agent for polyester polymers (PET, PBT, TPE), polylactide (PLA) and polyamides.

Product description

Chemical composition:	Aromatic polycarbodiimide; molecular weight approx. 3.000 g/mol
Physical form as supplied:	prills
Density (20 °C / 68 °F):	approx. 1.05 g/cm³
Melting range:	Approx. 70 - 90 °C (158 - 194 °F) Stabaxol® P 110 shows a very wide softening range. At approx. 60 °C (140 °F) it gradually begins to sinter; at temperatures above 70 °C (158 °F) it is resinous and tough; at temperatures above 90 °C (194 °F) it is a viscous fluid.
Carbodiimide content: (N=C=N)	> 11.5 %
Flash Point:	310 °C (590 °F)
Ignition Temperature:	> 455 °C (851°F)
Solubility:	very easily soluble in petrol (gasoline), benzene, carbon tetrachloride, trichloroethylene, methylenechloride; poor solubility in acetone; nearly insoluble in ethyl alcohol, water, and polyesters.

Use

Depending on the acid end group content and humidity content of the polymer to be stabilized as well as the stabilizing effect to be obtained, it is recommended to use 0.5 - 2.5 weight-% of Stabaxol® P 110 for polyesters, polyamides and polylactides.

The most suitable dosage depends on the requirements to be met and should always be ascertained in preliminary trials.

Stabaxol® P 110 may be processed preferably by way of separate feeding or alternatively by direct incorporation as a dry blend. Stabaxol® P 110 is available in Masterbatch form too, various types based upon the corresponding polymers, and thus offering the advantage of much more easier handling in respect of dosage and homogenizing.

Stabaxol® P 110 may be processed on any unit suitable for polyester and polyamide processing which provides sufficient dispersion of the neat material in the polymer. In respect of the extruder equipment, experience showed that it is advisable to use a twin-screw extruder equipped with a L/D ratio > 38. Appropriate cooling of the feeding zone is recommended to avoid particle accumulation in the feeding area. At precessing temperature traces of volatile matters can escape which may temporarily cause irritation of skin, eyes and respiratory passages. It is highly recommended to provide adequate local ventilation at all places where Stabaxol® P 110 stabilized products are exposed to temperatures exceeding 200 °C (392°F). In particular it is necessary to avoid direct contact with liberated vapours.

Packing

Fibre drums, contents 20 kg (44 lbs)

Storage stability

According to experience available, if stored at about 20 °C (68°F) in originally closed containers, Stabaxol® P 110 can be kept for at least 12 months without becoming less effective. Store in cool and dry place.

During transportation or in case of prolonged storage at slightly elevated temperatures, one might observe agglomeration of the particles. Please make sure that such agglomerations are being broken prior to use.

Handling

Consult material safety data sheet (MSDS) for additional handling information on Stabaxol® P 110.

® = registered trade mark

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